

REMARKS

Reconsideration and allowance of the present patent application based on the foregoing amendments and following remarks are respectfully requested.

In the pending Office Action, the Examiner rejected claim 7 under 35 U.S.C. §102(e) as allegedly being anticipated by, or alternatively under 35 U.S.C. §103(a) as allegedly unpatentable over Ohmi '875 (U.S. Pat. No. 6,719,875); rejected claim 7 under 35 U.S.C. §102(a) as allegedly being anticipated by, or alternatively under 35 U.S.C. §103(a) as allegedly unpatentable over Ohmi '695 (JP 2000-40695: equivalent of U.S. Pat. No. 6,719,875); rejected claims 1, 3-6, and 8-10, under 35 U.S.C. §103(a), as allegedly being unpatentable over Ohmi '875 in view of Robles '875 (U.S. Pat. No. 6,663,713) or Hwang '427 (U.S. Pat. No. 5,928,427); and rejected claim 7, under 35 U.S.C. §103(a) as allegedly being unpatentable over Shan '236 (U.S. Pat. No. 6,232,236) in view of Ohmi '500, Ohmi '875, or Ohmi '695.

By this Amendment, claims 1, 8, and 9 have been amended. No new matter has been added. Accordingly, claims 1 and 3-10 are currently submitted for examination, of which claims 1 and 7-9 are independent.

Applicants respectfully traverse the rejections, under §102(a), §102(e), and §103(a), for the following reasons:

I. Rejection of Claim 7.

As indicated above, claim 7 positively recites, *inter alia*, ***the auxiliary electrode having a front surface covered with an insulating material and a back surface not covered by the insulating material.*** Applicants submit that this feature is amply supported by the embodiments disclosed throughout the written description.

In rejecting claim 7, under §102(a), §102(e), and §103(a), the Examiner saw fit to rely on Ohmi '875 (or its Japanese equivalent Ohmi '695) as allegedly teaching such a feature. Applicants strenuously disagree.

In the passage relied upon, Ohmi '875 merely discloses that the auxiliary electrode is entirely covered with an insulating material. (*See, Ohmi '875*: column 7, lines 46-53). Such a disclosure is not new – nor does it anticipate the plain language of the claim.

Applicants submit that the present invention was based on the discovery that variations in etching rates in a wafer plane can be reduced by covering the front surface of the auxiliary electrode by the insulating material while not covering the back surface with the insulating material. This is clearly not an “obvious design choice”. Ohmi '875 does not hint, in any way, to the discovery that the etching rate is influenced by the insulating material covering the auxiliary electrode. And, even less, there is nothing in Ohmi '875 suggests that *the auxiliary electrode has a front surface covered with an insulating material and a back surface not covered by the insulating material*, as required by claim 7. Applicants point out that the word “on”, in which the Examiner repeatedly relies on for a dictionary definition, does not exist in this element of the claim.

Thus for at least these reasons, Applicants submit that Ohmi '875 neither anticipates nor renders claim 7 unpatentable. Accordingly, the immediate withdrawal of the §102(a), §102(e), and §103(a) rejections is respectfully requested.

II. Rejections of Claims 1, 3-6 and 8-10.

As indicated above, claim 1 positively recites, *inter alia*, *that the surface of the substrate and the front surface of the auxiliary electrode are within $\pm 2\text{mm}$ of each other in a direction perpendicular to the front surface of the auxiliary electrode*. Applicants submit that these features are amply supported by the embodiments disclosed throughout the written description. Indeed, the $\pm 2\text{ mm}$ requirement promotes electron drift over the substrate surface.

Applicants submit that none of the references, whether taken alone or in reasonable combination, teach each and every element of claim 1, including the features noted above. In particular, the Ohmi '875 reference is silent about the positional relationship between the substrate surface and the front surface of the auxiliary electrode or promoting electron drift over the substrate surface – much less that *the surface of the substrate and the front surface of the*

auxiliary electrode are within $\pm 2\text{mm}$ of each other in a direction perpendicular to the front surface of the auxiliary electrode, as required by claim 1.

Applicants further submit that the remaining asserted references fail to cure the deficiencies of Ohmi '875 noted above and fail in their own right to teach each and every element of claim 1. Specifically, Robles '875 and Hwang '427 disclose a movable substrate support table and by virtue of being moved, the Examiner makes an inherency argument asserting that the combination of Ohmi '875 and Robles '875/Hwang '427 will be capable of achieving the claimed distance. Applicants strenuously disagree.

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993). Applicants submit that just because Ohmi '875 and Robles '875/Hwang '427 teaches a movable substrate support, there is nothing in this combination that suggests that *the surface of the substrate and the front surface of the auxiliary electrode are within $\pm 2\text{mm}$ of each other in a direction perpendicular to the front surface of the auxiliary electrode*, as required by claim 1.

Equally notable, claim 1, like claim 7, positively recites *the front surface of said auxiliary electrode is covered by an insulating material, and the back surface of said auxiliary electrode is not covered by the insulating material*. The asserted references are devoid of such a feature.

Thus for at least these reasons, Applicants submit that none of the asserted references, whether taken alone or in reasonable combination, teach each and every element of claim 1. As such, claim 1 is clearly patentable. And because claims 3-6 depend from claim 1, claims 3-6 are patentable at least by virtue of dependency as well as for its additional recitations.

Moreover, because independent claims 8 and 10 share some of the patentable features as claim 1, claims 8 and 10 are patentable for at least the reasons presented above relative to claim 1. And because claim 9 depends from claim 8, claim 9 is patentable at least by virtue of dependency as well as for its additional recitations.

Independent claim 10 is additionally patentable by positively reciting that first electrode is supplied with a first radio frequency and the auxiliary electrode is supplied with a second radio frequency wherein *the first and the second radio frequencies are equal to each other while having* different predetermined *phases*. That is, the Shan '236 reference merely discloses that to magnetically enhance the plasma, a low frequency AC signal (e.g., 60 Hz) having rotating phase is optionally supplied to the magnets 270. (See, Shan '236: col. 4, lines 46-49). In so doing, it fails to suggest that *the first and the second radio frequencies are equal to each other while having* different predetermined *phases*, as required by claim 10.

Accordingly, the immediate withdrawal of the §103(a) rejections of claims 1, 3-6 and 8-10 is respectfully requested.

III. Conclusion.

All matters having been addressed and in view of the foregoing, Applicant respectfully requests the entry of this Amendment, the Examiner's reconsideration of this application, and the immediate allowance of all pending claims.

Applicant's representative remains ready to assist the Examiner in any way to facilitate and expedite the prosecution of this matter. If any point remains in issue which the Examiner feels may be best resolved through a personal or telephone interview, please contact the undersigned at the telephone number listed below.

Please charge any fees associated with the submission of this paper to Deposit Account Number 03-3975.

The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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